**CHALLENGES AND OPPORTUNITIES IN SUSTAINABLE GENETIC IMPROVEMENT OF ZEBU DAIRY FARMING**

**2023 Top 5 Milk Producer Countries:**

1. India ______ 236.3
2. USA ______ 102.9
3. Pakistan ______ 64.3
4. China ______ 43.4
5. Brazil ______ 36.6

(FAO, 2023)

**Country** | **Estimated Production (thousand tonnes)**
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1. India | 236.3
2. USA | 102.9
3. Pakistan | 64.3
4. China | 43.4
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**REPORTED CHALLENGES**

- Percentage of cows from different number of lactations available
- Long distances / highly diverse production systems

**SOLUTIONS ADOPTED**

- Maintaining TECHNICIANS trained and skilled for phenotype collection and advising breeders.
- Monitoring TECHNICIANS and Herds distributions of information
- Identifying outliers and RELIABLE HERDS

**IN THE FUTURE**

- Multi-breed genomic evaluation
- Genetic evaluation with these herds, incorporating more reliable phenotypes and new traits